Public consultation on the Strategic spectrum roadmap towards 5G for Europe - second Draft RSPG Opinion on 5G networks

ETNO Contribution

The European Telecommunications Networks Operators' Association (hereinafter ETNO) welcomes the second draft RSPG opinion on the strategic roadmap towards 5G for Europe, which aims to facilitate the launch of 5G on a large scale in Europe starting in 2020. ETNO believes that a strategic roadmap towards 5G should go beyond 2020, and should not aim at only facilitating the launch of 5G on a large scale by 2020 but also at enabling the European industrial and societal transformation and economic growth from 2020 onwards.

ETNO would like to encourage RSPG to take the following elements into consideration with regards to: spectrum, devices and network rollout.

Spectrum

- ETNO believes that clarity on the sufficient amount of exclusive spectrum that will be awarded for 5G in near future would enable operators to start making concrete plans for 5G.
- To support various use cases of 5G, new spectrum in both high and low frequency is needed and a technology and service neutral approach will enable existing and new bands to support delivery of 5G services.
- Large enough contiguous bandwidths and spectrum also in higher bands are crucial in order to provide proper 5G-experience. Preferred bandwidth per network is at least 100 MHz in 3.5 GHz band, and at least 800 MHz in 26 GHz band.
- 3400-3800 MHz band is recognized as a primary band suitable for the introduction of 5G use in Europe even before 2020. Furthermore, the expansion of this band up to 4.2 GHz for 5G purposes should be considered.
- The frequency bands between 4 GHz and 24 GHz although being of interest for the mobile industry, are not covered under WRC-19 agenda item 1.13.
- For 5G to succeed and to boost the European industrial and societal transformation, it is crucial to enable harmonized licensing of frequency bands below 6 GHz where a mobile ecosystem exists or could easily develop but which are not yet licensed for mobile in all EU countries. For example the 700 MHz, 1400 MHz (including the extensions agreed at WRC 15), 2300 MHz, and 3400-3800 MHz frequency bands should be made available in as many Member States as possible by 2020. Nationwide licenses on an exclusive basis should be favored as a mean to guarantee a fast deployment of the networks based on the existing footprint.

ETNO believes that the duration of licences, the deadlines for repurposing of the spectrum and the – non excessive - spectrum fees should be consistent among Member States. This would provide the necessary spectrum policy harmonization and predictability across Member States that would encourage investments needed for 5G. In addition, each Member State should publish their long-term plans on releasing sufficient amount of spectrum. This would help operators to plan their network service and investment over longer time-period. The released plans should include timelines, licensing approach, amount of spectrum per band, and plan to clear/share with the potential existing use.

Devices

As 5G development in Europe is dependent on the availability of 5G terminal and network equipment, ETNO urges RSPG and Member States to increase the predictability of the spectrum availability, as well as to consider the international developments and economies of scale.

It is important that 5G spectrum is made available at early phase. Each Member State should already in the first half of 2018 publish plans and timelines for awarding the 5G spectrum, as this creates a momentum for getting the European priority bands supported in the devices. Especially in the bands where global availability is not yet clear, e.g. 26 GHz and 42 GHz, the clarity on the actual spectrum availability is important for device support. The early high-band 5G-devices cannot be used in the European priority bands, as vendors focus on implementing support for bands, such as 28 GHz and 39 GHz, which have already been made available for large enough markets outside Europe.

Network Rollout

Furthermore, mobile communications networks are able to provide various applications and 5G is even better suited for serving the applications of specific needs, e.g. with network slicing. In addition, spectrum leasing is a tool which could be used for providing local needs of vertical players. Thus, ETNO believes that allocating spectrum for various use cases and/or niche players is not required as this would lead to spectrum defragmentation and will reduce the efficient use of spectrum.

ETNO would like to note that managing a mobile network is a complex process, and expected to become even more complex with large-scale introduction of MIMO and TDD. Adding more variables in form of local licenses and various niche/vertical players to coexist with, does not contribute in ensuring the needed quality to meet the 5G expectations in society. Thus, ETNO prefers nationwide exclusive licenses which help in reaching the necessary economies of scales required for assuring the equipment and devices availability. Even for higher bands, we believe that nationwide and exclusive licenses should be considered as they can provide the flexibility to use the spectrum based on the need, e.g. very high speed broadband in densely populated areas, low latency massive machine type communication in industrial facilities, and high capacity backhaul to 5G base stations in more rural areas.

As 5G is building on the existing 4G footprint, no additional coverage obligations should be considered by the Member States, which would go beyond what the market would deliver on a commercial basis. Such obligations are expensive to fulfill, and ultimately funded directly or indirectly by the taxpayers and consumers. ETNO agrees that the coverage obligations should not be harmonized in European level.

From a densified infrastructure roll-out perspective, easier site authorization and installation is important for 5G deployment. Slow and costly rollout process would delay the 5G deployment as well as complex administrative site authorization procedures that would burden both operators when submitting the applications and the administrations to process them. Streamlining is therefore of high relevance to assuring the level of densification required by the 5G networks. To this extent, it is also of the utmost importance that the EMF levels are harmonized all over Europe to avoid that excessively low and unjustified limits will impede 5G network roll-out.